WIRELESS ROUTER AND METHOD FOR PROCESSING TRAFFIC IN A WIRELESS COMMUNICATIONS NETWORK

ABSTRACT OF THE DISCLOSURE

A wireless communications network includes a wireless-specific router topology layer that connects cellular sites to a wireline topology. The wireless-specific router topology provides a distributed architecture in which call processing including call setup, resource preservation, air bandwidth allocation, switching, soft handoff, and micromobility is performed at the cell level. The wireless routers are technology independent to support various cellular technologies. The wireless router may include a first interface operable to communicate wireless packets for a call with a remote device and a second interface operable to communicate wireline packets for the call with the wireline network. A traffic controller is coupled to the first and second interfaces and operable to convert traffic between the wireless and wireline packets and to route packets to a destination mobile or wireline device. A selection and distribution unit is operable to select and distribute traffic to support soft handoff for calls in the wireless communications network.